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NOVA SCOTIA DAIRY FARM

BUSINESS SUMMARY REPORT

PREPARED BY: ROLLIE L. HAYMAN
SUPERVISOR, FARM MANAGEMENT

AND

DEBBIE FREEMAN
TECHNICIAN, FARM MANAGEMENT

EXTENSION SERVICES BRANCH

NOVA SCOTIA DEPARTMENT OF AGRICULTURE AND MARKETING

P R E F A C E

The 1982 Nova Scotia Dairy Farm Business Summary is a synopsis of the business performance of one hundred and fifteen (115) Nova Scotia Dairy Farms. The majority of these farms participated in the CanFarm Records Program in 1982.

The farms used in this summary were not selected on a random sample basis. Instead, farmers volunteered their data for use in the summary. Hence, care should be exercised in the use and interpretation of the results shown in the various tables of the publication.

Despite the above noted limitation, this publication can be used by farmers to compare their individual results with group average figures for farms with similar characteristics. Such comparison can provide the farm manager with useful information that can be used in management decisions. However, the best information is the farmers own records and comparison of these from year to year.

We gratefully acknowledge the co-operation of the one hundred and fifteen (115) dairy producers who participated in this summary. Without their co-operation and data, no summary would be possible.

We further acknowledge the efforts of Debbie Freeman, Farm Management Technician who prepared the data for this summary; Jamie Oxley, Agriculture Canada and John Stackhouse, NSAC who prepared the computer program; and Tracey Mitchell for the secretarial work in preparing the summary.

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Rollie L. Hayman, Supervisor
Farm Management

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Section A

Introduction

INTRODUCTION

The Nova Scotia Dairy Farm Business Summary is designed to provide bench-mark information that can be used to compare the financial strength and weakness of individual dairy farms with similar characteristics. Farm Business Analysis is an important function of the farm manager-operator. When analysing the farm business, you must ask meaningful questions regarding the costs, incomes, efficiencies and capital investment found in your business. This summary is designed to assist you with those questions and to provide you with basic information for comparison purposes. By identifying the strengths of your business and building on these, you should be able to enhance the profit picture of your farm business. By identifying the weaknesses of your business and taking corrective action, the profit picture should also be improved.

Standards of performance and business progress are matters of personal choice and family goal setting. Each farm situation will have a different set of goals or objectives - a different set of values that you feel must be met through the farm business. It is for each of you to identify these and then compare your performance in achieving these objectives.

There are several ways that you can compare your farm performance. These include:

- You can compare your performance this year to that of last year. This perhaps is the best comparison. Have you progressed in reaching the goals you have set for your farm business.

- You can compare your performance with group average data for farms of similar size and general characteristics. This report may be useful in this regard.

- You can compare your performance to that found by research - realizing that the research data was obtained under a special set of conditions.

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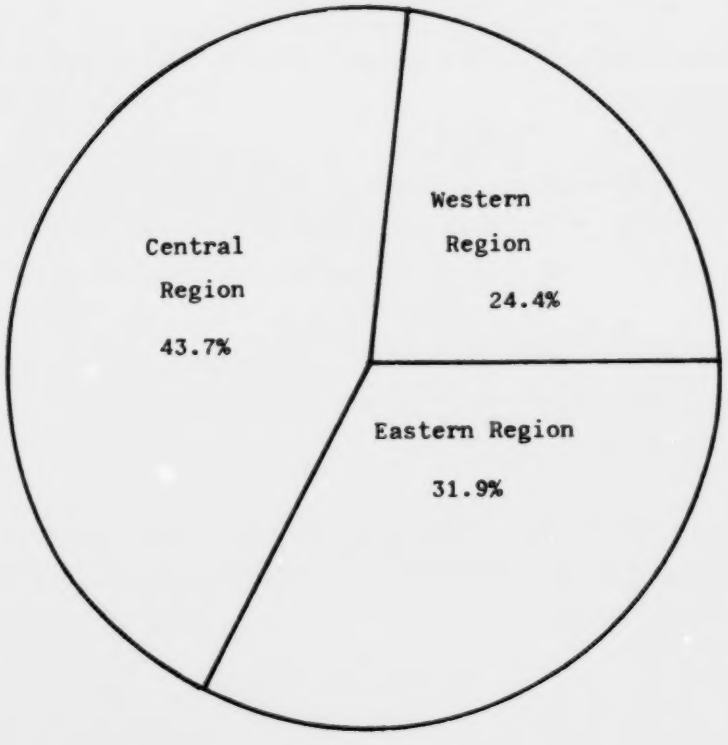
In 1982, there were a total of 650 fluid milk shippers in Nova Scotia. Basic data for this summary was prepared from 115 of these farms located throughout Nova Scotia. These 115 farms represent 17.7 percent of the total fluid milk farms in the province.

In terms of production, the farms included in the summary provided 40,003,228 litres of milk for sale. The total milk produced by fluid milk farms in the province was 171,115,541 litres. Hence, in production terms, farms in this summary comprise 23.4 percent of the total milk produced by fluid farms in Nova Scotia.

Figure A-1 provides useful information on the distribution of these one hundred and fifteen (115) farms relative to their location in the Province. A description of the counties contained within each region can be found following Figure A-1.

FIGURE A-1: DISTRIBUTION OF 115 DAIRY FARMS BY REGION WITHIN NOVA SCOTIA



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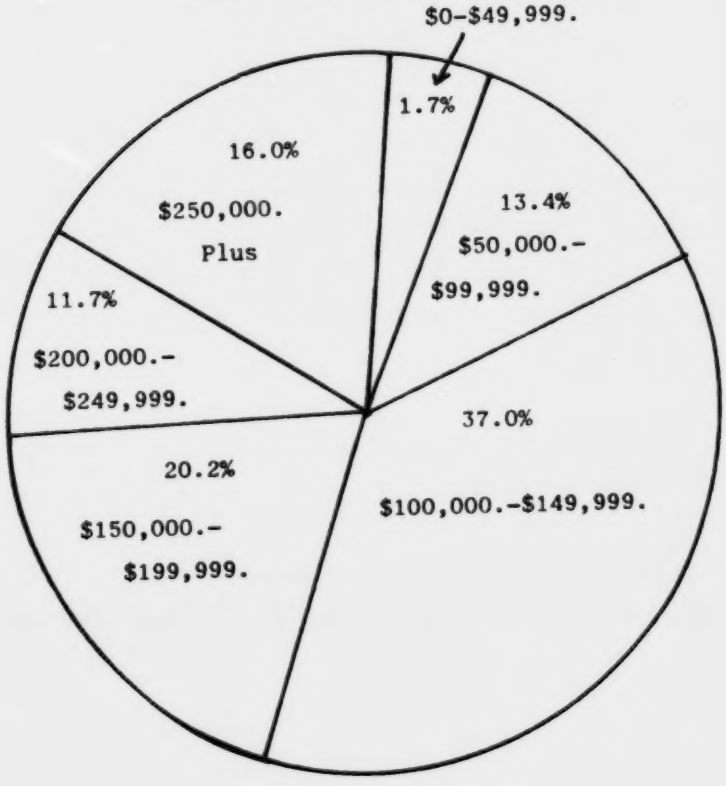
Central Region: Represents dairy farms from Colchester, Cumberland, East Hants, Halifax and Pictou Counties.

Eastern Region: Represents dairy farms from Antigonish, Cape Breton, Inverness and Victoria Counties.

Western Region: Represents dairy farms from Annapolis, Kings, Lunenburg, West Hants and Yarmouth Counties.

Figure A-2 provides information on the distribution of these one hundred and fifteen (115) dairy farms relative to the size of business measured in terms of Gross Farm Income.

FIGURE A-2: DISTRIBUTION OF 115 DAIRY FARMS BY GROSS FARM INCOME



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The one hundred and fifteen (115) dairy farms in the summary were classified into four (4) groups according to herd size. These groups were (1) 20-39 Cows, (2) 40-59 Cows, (3) 60-99 Cows and (4) 100 Plus Cows. The basic format for the presentation of information in this summary is as follows for Sections "B" through "F".

1. Receipts
2. Expenses
3. Income Summary
4. Net Cost of Production
5. Production Analysis
6. Balance Sheet
7. Balance Sheet Analysis
8. Labor Analysis
9. Analysis of Expenses
10. Receipts and Expenses Summary

Sections "G" and "H" provide additional information on the one hundred and fifteen (115) dairy farms by reclassifying these farms on the basis of production and investment levels per cow. Section "I" provides a Net Farm Income Analysis on a per farm and a per cow basis. Section "J" provides a summary of various production and management factors found throughout this summary. The Appendix contains comparison figures for the total group based on a per farm, per cow, per hectolitre, per hundredweight and percentage analysis basis. In addition, the Appendix contains a Glossary of Terms found throughout this summary.

Throughout the analysis, several assumptions were made and used that should be noted. These include:

(a) Tax depreciation was used in place of management depreciation. This may result in a slightly "higher than normal" depreciation figure in this summary.

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(b) Operator labor value must be considered minimal. The value chosen was the 1980 figure plus 7 percent in all size groupings.

(c) Investment figures used were farmers book values. These may or may not represent cost. They may or may not represent market value. Rather, some mixture of the two concepts may be more representative in many instances.

(d) Interest on Equity was calculated using a 12 percent interest rate.

Given the above assumptions, the basic data was then prepared. Throughout the summary, per farm and per cow figures are presented.

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Section B

Unit Size

20·39 cows

RECEIPTS

Herds in this size group averaged 82.4 percent of Total Farm Receipts from the Sale of Milk and Milk Subsidies. Fluid Milk Sales accounted for 69.8 percent of this total with Manufactured Milk Sales at 26.4 percent and Milk Subsidies at 3.8 percent.

Livestock Sales accounted for 7.1 percent, Crop Sales 0.9 percent and Miscellaneous Sales 9.6 percent of Total Farm Receipts. Total Farm Receipts were $91,534. per farm or $2,784. per cow.

TABLE B-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$ 52,612.	$ 1,600.
Manufactured Milk Sales	19,922.	606.
Milk Subsidies	2,841.	86.
Livestock Sales	6,522.	198.
Crop Sales	835.	25.
Miscellaneous Sales	8,802.	268.
TOTAL FARM RECEIPTS	$ 91,534.	$ 2,784.

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EXPENSES

Total Cash Expenses for this group of farms amounted to $74,881. per farm or $2,277. on a per cow basis.

Purchased dairy feed was the largest single expense item amounting to $698. on a per cow basis or 30.7 percent of Cash Expenses. Other major expense items included Interest at 11.1 percent, Miscellaneous at 8.2 percent, Tractor and Machinery Expense at 8.0 percent and Crop Expenses at 7.9 percent of Total Cash Expenses.

TABLE B-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 2,677.	$ 81.
Dairy Feed	22,955.	698.
Livestock Purchased	1,603.	49.
Vet & Drugs	1,033.	31.
Breeding	955.	29.
Dairy Supplies	2,215.	67.
Milk Marketing	3,792.	115.
Crop Expenses	5,879.	179.
Building & Fence Repairs	2,324.	71.
Utilities	3,516.	107.
Tractor and Machinery Expense	5,981.	182.
Truck & Auto Expense	1,655.	50.
Interest	8,278.	252.
Hired Labor	3,834.	117.
Taxes	646.	20.
Insurance	1,418.	43.
Miscellaneous	6,120.	186.
TOTAL CASH EXPENSES	$ 74,881.	$ 2,277.

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INCOME SUMMARY

There are a number of different measures of income that can be used to analyze a farm business. Each of these measures has important uses and three (3) of them are outlined and summarized below.

NET CASH INCOME is the difference between Farm Receipts and Cash Expenses. For this farm size group, Net Cash Income averaged $16,653. per farm or $507. on a per cow basis.

NET FARM INCOME makes two adjustements to Net Cash Income. These adjustments are Inventory Change and Depreciation. The resulting figure - Net Farm Income - is the return to the Operator for his labor, management and capital. For this group of farms, Net Farm Income amounted to $5,923. per farm or $181. on a per cow basis.

LABOR AND MANAGEMENT INCOME is the return to the operator for his labor and management skills after all other expenses have been deducted. Net Farm Income is reduced by a charge for capital use and a charge for Unpaid Family Labor to arrive at Labor and Management Income. For farms in this group, Labor and Management Income amounted to $2,526. or $77. on a per cow basis.

TABLE B-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$ 91,534.	$ 2,784.
Total Cash Expenses	74,881.	2,277.
NET CASH INCOME	$ 16,653.	$ 507.
Plus: Inventory Change	$ 362.	$ 11.
Less: Depreciation	11,092.	337.
NET FARM INCOME	$ 5,923.	$ 181.
Less: Value of Unpaid Family Labor	$ 218.	$ 7.
Interest on Equity @ 12%	3,179.	97.
LABOR AND MANAGEMENT INCOME	$ 2,526.	$ 77.

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NET COST OF PRODUCTION

This group of farms did not receive a return from the sale of milk sufficient to cover all costs at the assumed levels. Total Cost of Producing Milk averaged $82,665. per farm or $47.88 per hectolitre. The return from the sale of milk and milk subsidies averaged $75,375. per farm or $43.66 on a per hectolitre basis.

Note that all costs have been charged -- including a value for Operator Labor. If this charge was deducted, the return over costs would be $1.47 per hectolitre. This would then be the return to the operator for his labor.

TABLE B-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$ 74,881.	$ 2,277.
Plus: Depreciation		11,092.	337.
Inventory Change		-(362.)	-(11.)
Interest on Equity @ 12%		3,179.	97.
Value of Unpaid Family Labor		218.	7.
Operator Labor		9,816.	299.
Less: Sales (Excl. Milk)		-(16,159.)	-(491.)
NET COST OF PRODUCING MILK		$ 82,665.	$ 2,514.
Number of Cows	(#)	33	1
Total Litres of Milk Sold	(L)	172,658	5,251
Price Received per HL	($)	43.66	43.66
Cost of Producing Milk per HL	($)	47.88	47.88
NET RETURN PER HL	($)	$ -(4.22)	$-(4.22)

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PRODUCTION ANALYSIS

Farms in this group average 33 cows per farm with production per cow being 5,251 litres of milk. The average price received for a hectolitre of milk was $43.66

Purchased dairy feed, the largest single expense item, accounted for an expenditure of $22,955. per farm or $698. on a per cow basis. Purchased dairy feed accounted for 26.7 percent of total farm costs or for each hectolitre of milk sold, feed cost represented a charge of $13.29 against that milk revenue. Each farm in this group averaged 86,774 kilograms of purchased dairy feed or 2,639 kilograms on a per cow basis.

TABLE B-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	33	1
Total Litres of Milk Sold	(L)	172,658	5,251
Value of Milk Sold	($)	75,375	2,292
Price Received per HL Milk	($)	43.66	43.66
Fluid Milk (L's as % of Total Milk)	(%)	66.6	66.6
Fluid Milk ($'s as % of Total Milk)	(%)	69.8	69.8
Cost of Dairy Feed	($)	22,955	698
Feed Cost per HL Milk Sold	($)	13.29	13.29
Feed Cost as % of Total Cost	(%)	26.7	26.7
Feed Cost as % of Milk Sales	(%)	30.5	30.5
Kilograms of Feed/HL Milk	(KGS)	50.3	50.3
Kilograms of Feed	(KGS)	86,774	2,639
Pounds of Feed	(LBS)	196,977	5,991

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BALANCE SHEET

The Balance Sheet provides a measure of the financial health of a business at a particular point in time. The Balance Sheet is composed of three (3) main parts, namely:

ASSETS are all items of value used by the business.

LIABILITIES are debts owed by the business to others.

EQUITY OR NET WORTH is the difference between Assets and Liabilities and represents the amount of capital the owner has invested in the business.

For this group of farms, Total Assets per farm averaged $132,430. or $4,028. on a per cow basis. Liabilities averaged $105,937. per farm or $3,222. per cow. Equity, the difference between Assets and Liabilities averaged $26,493. per farm or $806. on a per cow basis.

TABLE B-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 20,115.	$ 612.
" " - Buildings	29,287.	891.
" " - Machinery	26,844.	816.
" " - Livestock	35,599.	1,083.
" " - Crops & Supplies	5,883.	179.
" " - Milk Quota	5,568.	169.
" " - Acct's Receivable	9,134.	278.
TOTAL INVENTORY VALUE - ASSETS	$ 132,430.	$ 4,028.
LIABILITIES:		
Short Term	$ 7,199.	$ 219.
Intermediate Term	12,458.	379.
Long Term	86,280.	2,624.
TOTAL LIABILITIES	$ 105,937.	$ 3,222.
EQUITY OR NET WORTH	$ 26,493.	$ 806.

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BALANCE SHEET ANALYSIS

Equity averaged 20 percent for farms in this size range. Farmers received no return to their equity capital and only a 3.15 percent return to Total Capital Invested in the Business.

Capital turnover averaged 1.44 years for this group of farms.

Current ratio was $2.09 - for each dollar of current liabilities there were $2.09 of current assets to cover the liability.

The ratio of Total Assets to Total Liabilities averaged $1.25.

Debt to Equity ratio averaged $4.00 - that is, for every $1.00 of equity, there were $4.00 worth of liabilities.

TABLE B-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	20.0
Return on Equity	(%)	-0-
Return on Invested Capital	(%)	3.15
Capital Turnover	(YRS)	1.44
Current Assets/Current Liabilities	($)	2.09
Total Assets/Total Liabilities	($)	1.25
Total Liabilities/Equity	($)	4.00

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LABOR ANALYSIS

For farms in this size range, the labor requirement averaged 1.44 man equivalents, made up of 1.08 operator and family and 0.36 hired man equivalents per farm.

Each man equivalent maintained 23 cows with milk produced per man of 119,901 litres worth $52,349.00.

Labor Income for operator and family averaged $2,541. for this group of farms.

TABLE B-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	33
Operator & Family Man Equivalents	(#)	1.08
Hired Man Equivalents	(#)	0.36
Total Man Equivalents	(#)	1.44
Cows per Man Equivalent	(#)	23
Milk Sold per Man Equivalent	(L)	119,901
Milk Sold per Man Equivalent	($)	52,349
Labor Income per Man Equivalent Operator & Unpaid Family	($)	2,541

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ANALYSIS OF EXPENSES

Purchased dairy feed was the largest single expense item and accounted for 26.7 percent of Total Costs. Feed was followed by Depreciation at 12.9 percent, Interest at 9.6 percent, Miscellaneous at 7.1 percent, Tractor and Machinery Expenses at 7.0 percent, and Crop Expenses at 6.8 percent of Total Costs.

TABLE B-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 81.	3.1 %
Dairy Feed	698.	26.7
Livestock Purchases	49.	1.9
Vet & Drugs	31.	1.2
Breeding	29.	1.1
Dairy Supplies	67.	2.6
Milk Marketing	115.	4.4
Crop Expenses	179.	6.8
Building & Fence Repairs	71.	2.7
Utilities	107.	4.1
Tractor & Machinery Expenses	182.	7.0
Truck & Auto Expenses	50.	1.9
Interest	252.	9.6
Hired Labor	117.	4.5
Taxes	20.	0.8
Insurance	43.	1.6
Miscellaneous	186.	7.1
Depreciation	337.	12.9
TOTAL EXPENSES	$2,615.	100.0 %

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RECEIPTS AND EXPENSES SUMMARY

Figures presented in this section of the report represent receipts and expenses for this size group of farms on a per cow, per hectolitre and per hundredweight of milk sold basis.

TABLE B-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER HECTOLITRE	PER CWT
RECEIPTS:			
Fluid Milk Sales	$ 1,600.	$ 30.47	$ 13.42
Manufactured Milk Sales	606.	11.54	5.08
Milk Subsidies	86.	1.65	0.73
Livestock Sales	198.	3.78	1.66
Crop Sales	25.	0.48	0.21
Miscellaneous Sales	268.	5.10	2.25
TOTAL FARM RECEIPTS	$ 2,784.	$ 53.01	$ 23.35
Adj. for Inventory Change	$ 11.	$ 0.21	$ 0.09
TOTAL FARM INCOME	$ 2,795.	$ 53.22	$ 23.44
EXPENSES:			
Milk Hauling	$ 81.	$ 1.55	$ 0.68
Dairy Feed	698.	13.29	5.85
Livestock Purchases	49.	0.93	0.41
Vet & Drugs	31.	0.60	0.26
Breeding	29.	0.55	0.24
Dairy Supplies	67.	1.28	0.56
Milk Marketing	115.	2.20	0.97
Crop Expenses	179.	3.40	1.50
Building & Fence Repairs	71.	1.35	0.59
Utilities	107.	2.04	0.90
Tractor & Machinery Expenses	182.	3.46	1.52
Truck & Auto Expenses	50.	0.96	0.42
Interest	252.	4.79	2.11
Hired Labor	117.	2.22	0.98
Taxes	20.	0.37	0.16
Insurance	43.	0.82	0.36
Miscellaneous	186.	3.54	1.56
TOTAL CASH EXPENSES	$ 2,277.	$ 43.37	$ 19.10
Depreciation	$ 337.	$ 6.42	$ 2.83
TOTAL FARM EXPENSES	$ 2,614.	$ 49.79	$ 21.93
NET FARM INCOME	$ 181.	$ 3.43	$ 1.51

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Section C

Unit Size

40-59 cows

RECEIPTS

Receipts from milk and milk subsidies accounted for 85.1 percent of Total Farm REceipts for farms in this size range. Of this amount, fluid milk represented 67.3 percent, manufactured milk 28.4 percent and milk subsidies 4.3 percent of these receipts.

Livestock sales averaged 8.0 percent of Total Farm Receipts, while Crop Receipts averaged 0.9 percent and Miscellaneous sales 6.0 percent.

Total Farm Receipts were $134,034. on a per farm basis or $2,732. on a per cow basis for farms in this size range.

TABLE C-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$ 76,782.	$ 1,565.
Manufactured Milk Sales	32,367.	660.
Milk Subsidies	4,854.	99.
Livestock Sales	10,721.	218.
Crop Sales	1,163.	24.
Miscellaneous Sales	8,147.	166.
TOTAL FARM RECEIPTS	$134,034.	$ 2,732.

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EXPENSES

For farms in this size range, Total Cash Expenses averaged $107,458. per farm or $2,190. on a per cow basis. Purchased dairy feed was the largest single expense item and averaged $709. on a per cow basis or in percentage terms, dairy feed represented 32.4 percent of cash expenses.

Feed was followed by Interest at 8.9 percent, Hired Labor at 8.0 percent, Crop Expenses at 7.5 percent, and Tractor and Machinery Expense at 7.3 percent of Total Cash Expenses.

TABLE C-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 4,148.	$ 85.
Dairy Feed	34,802.	709.
Livestock Purchased	2,964.	60.
Vet & Drugs	1,321.	27.
Breeding	1,194.	24.
Dairy Supplies	3,073.	63.
Milk Marketing	5,603.	114.
Crop Expenses	8,089.	165.
Building & Fence Repairs	3,332.	68.
Utilities	3,737.	76.
Tractor and Machinery Expense	7,859.	160.
Truck & Auto Expenses	2,594.	53.
Interest	9,608.	196.
Hired Labor	8,587.	175.
Taxes	692.	14.
Insurance	2,195.	45.
Miscellaneous	7,661.	156.
TOTAL CASH EXPENSES	$107,458.	$ 2,190.

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INCOME SUMMARY

There are a number of different measures of income that are important indicators to the analyst when the health of the farm business is being assessed. Three (3) of these measures are:

NET CASH INCOME is the difference between Farm Receipts and Cash Expenses. For farms in this group, Net Cash Income averaged $26,576. on a per farm basis or $542. on a per cow basis.

NET FARM INCOME refines Income a further step by making adjustments to Net Cash Income for Inventory Change and Depreciation. Net Farm Income averaged $12,452. per farm or $255. on a per cow basis for farms in this group.

LABOR AND MANAGEMENT INCOME represents that amount of Income left for the Operator for his labor and management skills. In this group of farms, this amount was $2,076. per farm or $43. per cow.

TABLE C-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$134,034.	$ 2,732.
Total Cash Expenses	107,458.	2,190.
NET CASH INCOME	$ 26,576.	$ 542.
Plus: Inventory Change	$ 1,599.	$ 33.
Less: Depreciation	15,723.	320.
NET FARM INCOME	$ 12,452.	$ 255.
Less: Value of Unpaid Family Labor	$ 526.	$ 11.
Interest on Equity @ 12%	9,850.	201.
LABOR AND MANAGEMENT INCOME	$ 2,076.	$ 43.

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NET COST OF PRODUCTION

Farms in this size group did not receive a return to all factors of production from the sale of milk in 1982. On a farm basis, net cost of producing milk averaged $124,305.00. Viewed on a per hectolitre of milk sold basis, this cost was $46.97. Return from the sale of milk averaged $43.08 per hectolitre leaving a net return of $-(3.89).

All costs, including a value for operator labor were included in the above calculation. If operator labor was excluded, the cost would then be $42.30. This would leave a positive return over costs of $0.78 per hectolitre and this would be the return to the operator for his labor.

TABLE C-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$107,458.	$ 2,190.
Plus: Depreciation		15,723.	320.
Inventory Change		-(1,599.)	-(33.)
Interest on Equity @ 12%		9,850.	201.
Value of Unpaid Family Labor		526.	11.
Operator Labor		12,378.	252.
Less: Sales (Excl. Milk)		-(20,031.)	-(408.)
NET COST OF PRODUCING MILK		$124,305.	$ 2,533.
Number of Cows	(#)	49	1
Total Litres of Milk Sold	(L)	264,656	5,393
Price Received per HL	($)	43.08	43.08
Cost of Producing Milk per HL	($)	46.97	46.97
NET RETURN PER HL	($)	-(3.89)	-(3.89)

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PRODUCTION ANALYSIS

For farms in this size range, total milk sales averaged 264,656 litres per farm. There were an average of 49 cows per farm, each providing 5,393 litres of milk for sale.

Fluid milk represented 64 percent by volume of milk sales or 67.3 percent of the dollar value of milk sales. Blend milk price averaged $43.08 per hectolitre.

Feed, the largest single expense item accounted for 28.25 percent of total costs and represented an expenditure of $13.15 for each hectolitre of milk sold. On average, each farm in this group purchased 135,817 kilograms of dairy feed. On a per cow basis, 2,768 kilograms of purchased feed were consumed.

TABLE C-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	49	1
Total Litres of Milk Sold	(L)	264,656	5,393
Value of Milk Sold	($)	114,003	2,324
Price Received per HL Milk	($)	43.08	43.08
Fluid Milk (L's as % of Total Milk)	(%)	64.0	64.0
Fluid Milk ($'s as % of Total Milk)	(%)	67.3	67.3
Cost of Dairy Feed	($)	34,802	709
Feed Cost per HL Milk Sold	($)	13.15	13.15
Feed Cost as % of Total Cost	(%)	28.25	28.25
Feed Cost as % of Milk Sales	(%)	30.5	30.5
Kilograms of Feed/HL Milk	(KGS)	51.3	51.3
Kilograms of Feed	(KGS)	135,817	2,768
Pounds of Feed	(LBS)	308,304	6,283

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BALANCE SHEET

The Balance Sheet captures a picture of the financial position of a business at a particular point in time. The Balance Sheet is composed of three (3) main parts, namely:

ASSETS which are all items of value used by the business to earn income.

LIABILITIES which are debts owed by the business to others.

EQUITY OR NET WORTH which is the difference between Assets and Liabilities and represents owners capital contribution to the business.

For this group of farms, Assets average $200,148. per farm or $4,079. on a per cow basis. Liabilities averaged $118,063. per farm or $2,406. per cow leaving the difference, Equity, at $82,085. per farm or $1,673. on a per cow basis.

TABLE C-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 28,874.	$ 588.
" " - Buildings	42,449.	865.
" " - Machinery	36,697.	748.
" " - Livestock	58,577.	1,194.
" " - Crops & Supplies	11,558.	236.
" " - Milk Quota	9,735.	198.
" " - Acct's Receivable	12,258.	250.
TOTAL INVENTORY VALUE - ASSETS	$200,148.	$ 4,079.
LIABILITIES:		
Short Term	$ 8,868.	$ 181.
Intermediate Term	14,425.	294.
Long Term	94,770.	1,931.
TOTAL LIABILITIES	$118,063.	$ 2,406.
EQUITY OR NET WORTH	$ 82,085.	$ 1,673.

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BALANCE SHEET ANALYSIS

Owner's Equity for farms in this size group average 41 percent of Total Capital Invested. There was no return to equity capital and a 4.57 percent return to Total Capital Invested.

Capital turnover was accomplished in 1.48 years.

Current ratio averaged $2.69 - that is, for each dollar in current liabilities, there were $2.69 worth of current assets.

Debt to Equity ratio was $1.44 - for each $1.44 worth of debt, there was $1.00 worth of equity.

TABLE C-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	41.0
Return on Equity	(%)	-0-
Return on Invested Capital	(%)	4.57
Capital Turnover	(YRS)	1.48
Current Assets/Current Liabilities	($)	2.69
Total Assets/Total Liabilities	($)	1.70
Total Liabilities/Equity	($)	1.44

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LABOR ANALYSIS

The labor requirement for farms in this size group averaged 1.99 man equivalents of which 1.18 were operator and family, and 0.81 were hired man equivalents.

For each man equivalent, 25 cows were maintained with 133,665 litres of milk sold worth $57,583.

Labor Income per man equivalent for operator and family labor amounted to $2,205. for farms in this group.

TABLE C-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	49
Operator and Family Man Equivalents	(#)	1.18
Hired Man Equivalents	(#)	0.81
Total Man Equivalents	(#)	1.99
Cows per Man Equivalent	(#)	25
Milk Sold per Man Equivalent	(L)	133,665
Milk Sold per Man Equivalent	($)	57,583
Labor Income per Man Equivalent Operator and Unpaid Family	($)	2,205

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ANALYSIS OF EXPENSES

Purchased dairy feed is the largest expense item for farms in this group. Feed accounts for 28.2 percent of total costs. Other expense items of significance include Depreciation at 12.8 percent, Interest at 7.8 percent, hired labor at 7.0 percent and Crop Expenses at 6.6 percent of total expenses.

TABLE C-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 85.	3.4 %
Dairy Feed	709.	28.2
Livestock Purchases	60.	2.4
Vet & Drugs	27.	1.1
Breeding	24.	1.0
Dairy Supplies	63.	2.5
Milk Marketing	114.	4.5
Crop Expenses	165.	6.6
Building and Fence Repairs	68.	2.7
Utilities	76.	3.0
Tractor & Machinery Expenses	160.	6.4
Truck & Auto Expenses	53.	2.1
Interest	196.	7.8
Hired Labor	175.	7.0
Taxes	14.	0.5
Insurance	45.	1.8
Miscellaneous	156.	6.2
Depreciation	320.	12.8
TOTAL EXPENSES	$2,510.	100.0 %

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RECEIPTS AND EXPENSES SUMMARY

Information provided in this section summarizes receipts and expenses for this group of farms on a per cow, per hectolitre, and per hundredweight milk sold basis.

TABLE C-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER HECTOLITRE	PER CWT
RECEIPTS:			
Fluid Milk Sales	$1,565.	$ 29.01	$ 12.78
Manufactured Milk Sales	660.	12.23	5.39
Milk Subsidies	99.	1.83	0.81
Livestock Sales	218.	4.05	1.78
Crop Sales	24.	0.44	0.19
Miscellaneous Sales	166.	3.08	1.36
TOTAL FARM RECEIPTS	$2,732.	$ 50.64	$ 22.31
Adj. for Inventory Change	$ 33.	$ 0.60	$ 0.26
TOTAL FARM INCOME	$2,765.	$ 51.24	$ 22.57
EXPENSES:			
Milk Hauling	$ 85.	$ 1.57	$ 0.69
Dairy Feed	709.	13.15	5.79
Livestock Purchases	60.	1.12	0.49
Vet & Drugs	27.	0.50	0.22
Breeding	24.	0.45	0.20
Dairy Supplies	63.	1.16	0.51
Milk Marketing	114.	2.12	0.93
Crop Expenses	165.	3.06	1.35
Building & Fence Repairs	68.	1.26	0.55
Utilities	76.	1.41	0.62
Tractor & Machinery Expenses	160.	2.97	1.31
Truck & Auto Expenses	53.	0.98	0.43
Interest	196.	3.63	1.60
Hired Labor	175.	3.24	1.43
Taxes	14.	0.26	0.11
Insurance	45.	0.83	0.36
Miscellaneous	156.	2.89	1.27
TOTAL CASH EXPENSES	$2,190.	$ 40.60	$ 17.88
Depreciation	$ 320.	$ 5.94	$ 2.62
TOTAL FARM EXPENSES	$2,510.	$ 46.54	$ 20.50
NET FARM INCOME	$ 255.	$ 4.70	$ 2.07

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Section D

Unit Size

60-99 cows

RECEIPTS

For farms in this group, receipts from milk and milk subsidies accounted for 86.4 percent of Total Farm Receipts. Of this amount, fluid sales amounted to 70.2 percent, manufactured sales 25.7 percent and milk subsidies 4.1 percent.

Livestock sales averaged 6.5 percent of Total Farm Receipts, while crop sales averaged 1.5 percent and miscellaneous sales 5.6 percent.

Total Farm Receipts amounted to $205,276. per farm or $2,828. on a per cow basis.

TABLE D-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$124,615.	$1,717.
Manufactured Milk Sales	45,644.	629.
Milk Subsidies	7,141.	98.
Livestock Sales	13,363.	184.
Crop Sales	3,152.	43.
Miscellaneous Sales	11,362.	157.
TOTAL FARM RECEIPTS	$205,276.	$2,828.

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EXPENSES

Total Cash Expenses averaged $165,628. per farm or $2,282. on a per cow basis for farms in this size range. The largest expense item was purchased dairy feed which amounted to $49,123. per farm or $677. on a per cow basis. In percentage terms, dairy feed accounted for 29.7 percent of Total Cash Expenses. Feed was followed by interest at 10.9 percent, hired labor at 10.1 percent, miscellaneous at 8.5 percent and crop expenses at 8.4 percent.

TABLE D-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 6,392.	$ 88.
Dairy Feed	49,123.	677.
Livestock Purchased	4,080.	56.
Vet & Drugs	1,917.	26.
Breeding	1,697.	23.
Dairy Supplies	4,068.	56.
Milk Marketing	7,559.	104.
Crop Expenses	13,931.	192.
Building & Fence Repairs	4,013.	55.
Utilities	4,802.	66.
Tractor & Machinery Expense	12,789.	176.
Truck & Auto Expense	2,392.	33.
Interest	18,034.	248.
Hired Labor	16,666.	230.
Taxes	1,116.	15.
Insurance	2,975.	41.
Miscellaneous	14,073.	194.
TOTAL CASH EXPENSES	$165,628.	$2,282.

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INCOME SUMMARY

When analysing a farm business, one of the factors studied is income. Several different measures of income are available to provide a variety of information to the analyst.

NET CASH INCOME is the difference between Farm Receipts and Cash Expenses. The average for this group of farms was $39,648. or $546. on a per cow basis.

NET FARM INCOME further refines Net Cash Income by making adjustments for inventory change and depreciation. The average Net Farm Income for farms in this group was $14,112. per farm or $194. on a per cow basis.

LABOR AND MANAGEMENT INCOME adjusts Net Farm Income for unpaid family labor and return on equity. This income measure shows the amount of dollars left for Operator Labor and Management after all other costs have been satisfied. For this group of farms, Labor and Management Income was $-(2,210.) per farm or $-(31.) on a per cow basis.

TABLE D-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$205,276.	$2,828.
Total Cash Expenses	165,628.	2,282.
NET CASH INCOME	$ 39,648.	$ 546.
Plus: Inventory Change	$ 253.	$ 3.
Less: Depreciation	25,789.	355.
NET FARM INCOME	$ 14,112.	$ 194.
Less: Value of Unpaid Family Labor	$ 452.	$ 6.
Interest on Equity @ 12%	15,870.	219.
LABOR AND MANAGEMENT INCOME	$-(2,210.)	$ -(31.)

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NET COST OF PRODUCTION

The Net Cost of Producing Milk for farms in this size range averaged $196,084. per farm or $2,701. on a per cow basis. Viewed on a per hectolitre basis, this translated to $47.81, while revenue from the sale of milk was $43.26. Hence, a negative net return of $-(4.56) was achieved by this group of farms.

It should be noted that all costs, including operator labor have been included in this calculation. If Operator Labor was excluded, then the cost would be $43.79 per hectolitre. This would give a negative return of $-(0.53) per hectolitre and this amount would be the return to Operator Labor and Management.

TABLE D-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$165,628.	$2,282.
Plus: Depreciation		25,789.	355.
Inventory Change		-(253.)	-(3.)
Interest on Equity @ 12%		15,870.	219.
Value of Unpaid Family Labor		452.	6.
Operator Labor		16,475.	227.
Less: Sales (Excl. Milk)		-(27,876.)	-(384.)
NET COST OF PRODUCING MILK		$196,084.	$2,701.
Number of Cows	(#)	73	1
Total Litres of Milk Sold	(L)	410,111	5,649
Price Received per HL	($)	43.26	43.26
Cost of Producing Milk per HL	($)	47.81	47.81
NET RETURN PER HL	($)	$ -(4.56)	$-(4.56)

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PRODUCTION ANALYSIS

Total production of milk per farm for this group averaged 410,111 litres of milk or 5,649 litres on a per cow basis. Purchased dairy feed amounted to $49,123. on a per farm basis, $677. on a per cow basis, and $11.98 on a per hectolitre basis. In percentage terms, feed cost represented 25.7 percent of total cost or 27.7 percent of milk sales.

TABLE D-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	73	1
Total Litres of Milk Sold	(L)	410,111	5,649
Value of Milk Sold	($)	177,400	2,444
Price Received per HL Milk	($)	43.26	43.26
Fluid Milk (L's as % of Total Milk)	(%)	67.3	67.3
Fluid Milk ($'s as % of Total Milk)	(%)	70.2	70.2
Cost of Dairy Feed	($)	49,123	677
Feed Cost per HL Milk Sold	($)	11.98	11.98
Feed Cost as % of Total Cost	(%)	25.7	25.7
Feed Cost as % of Milk Sales	(%)	27.7	27.7
Kilograms of Feed/HL Milk	(Kgs)	46.58	46.58
Kilograms of Feed	(Kgs)	191,015	2,631
Pounds of Feed	(Lbs)	433,604	5,973

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BALANCE SHEET

The Balance Sheet provides a measure of the financial position of a business at a particular point in time. There are three (3) main parts to a balance sheet, namely:

ASSETS which are items of value owned by the business.

LIABILITIES which are debts owed to others.

EQUITY OR NET WORTH which is the difference between Assets and Liabilities and represents the contribution of owners capital to the business.

For farms in this group, total assets averaged $331,603. with liabilities of $199,355., leaving an equity of $132,248.00. On a per cow basis, assets were $4,568., liabilities were $2,746. and equity was $1,822.00.

TABLE D-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 46,435.	$ 640.
" " - Buildings	75,833.	1,045.
" " - Machinery	60,938.	839.
" " - Livestock	91,009.	1,254.
" " - Crops & Supplies	17,735.	244.
" " - Milk Quota	15,520.	214.
" " - Acct's Receivable	24,134.	332.
TOTAL INVENTORY VALUE - ASSETS	$331,603.	$4,568.
LIABILITIES:		
Short Term	$ 18,012.	$ 248.
Intermediate Term	40,128.	553.
Long Term	141,215.	1,945.
TOTAL LIABILITITES	$199,355.	$2,746.
EQUITY OR NET WORTH	$132,248.	$1,822.

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BALANCE SHEET ANALYSIS

Equity in farms of this group averaged 39.9 percent of Total Invested Capital. Farmers did not receive a return to their equity capital, but did receive a return of 4.59 percent to Total Capital.

Capital turnover averaged 1.61 years for these farms.

Current ratio was $2.32, while Total Assets to Total Liabilities ratio was $1.66 - that is for each $1.66 dollars worth of Assets there was $1.00 in Liabilities.

Debt to Equity ratio was $1.51.

TABLE D-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	39.9
Return on Equity	(%)	-0-
Return on Invested Capital	(%)	4.59
Capital Turnover	(Yrs)	1.61
Current Assets/Current Liabilities	($)	2.32
Total Assets/Total Liabilities	($)	1.66
Total Liabilities/Equity	($)	1.51

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LABOR ANALYSIS

The labor requirement for farms in this size range averaged 1.31 operator and family man equivalents, and 1.57 hired man equivalents, for a total of 2.88 man equivalents. For each man equivalent of labor, 25 cows were maintained producing 142,400 litres of milk for sale worth $61,602.00.

Labor Income for operator and family per man equivalent averaged $-(1,342.) for this group of farms.

TABLE D-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	73
Operator & Family Man Equivalents	(#)	1.31
Hired Man Equivalents	(#)	1.57
Total Man Equivalents	(#)	2.88
Cows per Man Equivalent	(#)	25
Milk Sold per Man Equivalent	(L)	142,400
Milk Sold per Man Equivalent	($)	61,602
Labor Income per Man Equivalent Operator & Unpaid Family	($)	-(1,342)

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ANALYSIS OF EXPENSES

For farms in this size group, purchased dairy feed was the largest single expense item and accounted for 25.7 percent of Total Expenses. Dairy feed was followed by depreciation at 13.5 percent, interest at 9.4 percent, hired labor at 8.7 percent, and crop expenses and miscellaneous both at 7.3 percent of total costs.

TABLE D-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 88.	3.3 %
Dairy Feed	677.	25.7
Livestock Purchases	56.	2.1
Vet & Drugs	26.	1.0
Breeding	23.	0.9
Dairy Supplies	56.	2.1
Milk Marketing	104.	4.0
Crop Expenses	192.	7.3
Building & Fence Repairs	55.	2.1
Utilities	66.	2.5
Tractor & Machinery Expenses	176.	6.7
Truck & Auto Expenses	33.	1.2
Interest	248.	9.4
Hired Labor	230.	8.7
Taxes	15.	0.6
Insurance	41.	1.6
Miscellaneous	194.	7.3
Depreciation	355.	13.5
TOTAL EXPENSES	$2,637.	100.0 %

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RECEIPTS AND EXPENSES SUMMARY

For this group of farms, information in the table below is presented on a per cow, per hectolitre and per hundredweight of milk sold basis.

TABLE D-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER HECTOLITRE	PER CWT
RECEIPTS:			
Fluid Milk Sales	$1,717.	$ 30.39	$13.39
Manufactured Milk Sales	629.	11.13	4.90
Milk Subsidies	98.	1.74	0.77
Livestock Sales	184.	3.26	1.44
Crop Sales	43.	0.77	0.34
Miscellaneous Sales	157.	2.77	1.22
TOTAL FARM RECEIPTS	$2,828.	$ 50.06	$22.05
Adj. for Inventory Change	$ 3.	$ 0.06	$ 0.03
TOTAL FARM INCOME	$2,831	$ 50.12	$22.08
EXPENSES:			
Milk Hauling	$ 88.	$ 1.56	$ 0.69
Dairy Feed	677.	11.98	5.28
Livestock Purchases	56.	0.99	0.44
Vet & Drugs	26.	0.47	0.21
Breeding	23.	0.41	0.18
Dairy Supplies	56.	0.99	0.44
Milk Marketing	104.	1.84	0.81
Crop Expenses	192.	3.40	1.50
Building & Fence Repairs	55.	0.98	0.43
Utilities	66.	1.17	0.52
Tractor & Machinery Expenses	176.	3.12	1.37
Truck & Auto Expenses	33.	0.58	0.25
Interest	248.	4.40	1.94
Hired Labor	230.	4.06	1.79
Taxes	15.	0.27	0.12
Insurance	41.	0.73	0.32
Miscellaneous	194.	3.43	1.51
TOTAL CASH EXPENSES	$2,282.	$ 40.39	$17.79
Depreciation	$ 355.	$ 6.29	$ 2.77
TOTAL FARM EXPENSES	$2,637.	$ 46.67	$20.56
NET FARM INCOME	$ 194.	$ 3.44	$ 1.52

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Section E

Unit Size

100+ cows

RECEIPTS

For farms in this size range, average Total Farm Receipts were $378,455. per farm or $2,846. on a per cow basis.

These farms were highly specialized dairy farms with income from milk and milk subsidies accounting for 84.7 percent of Total Farm Receipts. Of this amount, Fluid Milk Sales represented 61.1 percent, Manufactured Milk Sales 32.9 percent and Milk Subsidies 6.0 percent.

Livestock Sales accounted for 7.4 percent of Total Farm Receipts while Crop Sales averaged 2.1 percent and Miscellaneous Sales 5.7 percent.

TABLE E-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$196,088.	$1,474.
Manufactured Milk Sales	105,531.	794.
Milk Subsidies	19,112.	144.
Livestock Sales	27,972.	210.
Crop Sales	8,079.	61.
Miscellaneous Sales	21,673.	163.
TOTAL FARM RECEIPTS	$378,455.	$2,846.

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EXPENSES

Farms in this group averaged $306,133. in Cash Expenses on a per farm basis or $2,302. on a per cow basis.

Purchased dairy feed was the largest expense item accounting for $96,602. on a per farm basis. This represents $726. on a per cow basis or 31.6 percent of Cash Expenses. Feed was followed by miscellaneous expenses at 11.0 percent, hired labor at 10.8 percent, crop expenses at 9.4 percent and interest at 7.6 percent of Cash Expenses.

TABLE E-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 10,902.	$ 82.
Dairy Feed	96,602.	726.
Livestock Purchased	5,401.	41.
Vet & Drugs	3,489.	26.
Breeding	3,536.	27.
Dairy Supplies	7,003.	53.
Milk Marketing	17,139.	129.
Crop Expense	28,702.	216.
Building & Fence Repairs	6,039.	45.
Utilities	7,170.	54.
Tractor & Machinery Expense	20,849.	157.
Truck & Auto Expense	3,960.	30.
Interest	23,319.	175.
Hired Labor	33,203.	250.
Taxes	1,438.	11.
Insurance	3,684.	28.
Miscellaneous	33,699.	253.
TOTAL CASH EXPENSES	$306,133.	$2,302.

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INCOME SUMMARY

When analyzing a farm business, different measures of Income are often used to provide information about the farm business. In this section, three (3) of these measures are analyzed.

NET CASH INCOME is the difference between Cash Receipts and Cash Expenses. For these farms this averaged $72,322. per farm or $544. on a per cow basis.

NET FARM INCOME is that amount of money that represents a return to the Operator for his labor, management and capital. It is found by adjusting Net Cash Income for Inventory Change and Depreciation. For these farms, Net Farm Income averaged $35,439. per farm or $266. on a per cow basis.

LABOR AND MANAGEMENT INCOME represents the return to the operator for his labor and management skills. It is found by adjusting Net Farm Income for unpaid family labor and return to equity. For these farms, Labor and Management Income averaged $3,143. per farm or $24. on a per cow basis.

TABLE F-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$378,455.	$2,846.
Total Cash Expenses	306,133.	2,302.
NET CASH INCOME	$ 72,322.	$ 544.
Plus: Inventory Change	$ 5,129.	$ 39.
Less: Depreciation	42,004.	316.
NET FARM INCOME	$ 35,439.	$ 266.
Less: Value of Unpaid Family Labor	$ 1,672.	$ 13.
Interest on Equity @ 12%	30,623.	230.
LABOR AND MANAGEMENT INCOME	$ 3,143.	$ 24.

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NET COST OF PRODUCTION

The Net Cost of Producing Milk for this group of farms averaged $341,288. per farm or $2,566. on a per cow basis. On a per hectolitre basis, this cost was $45.78, while revenue from the sale of milk averaged $43.02 per hectolitre. Hence, the net return was $-(2.76) per hectolitre.

It should be noted that all costs have been included in the above calculation. If operator labor was excluded, the Net Cost would be $42.60 per hectolitre, giving a Net Return of $0.42 per hectolitre. This amount would then represent the return to the operator for his labor and management skills.

TABLE E-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$306,133.	$2,302.
Plus: Depreciation		42,004.	316.
Inventory Change		-(5,120.)	-(39.)
Interest on Equity @ 12%		30,623.	230.
Value of Unpaid Family Labor		1,672.	13.
Operator Labor		23,699.	178.
Less: Sales (Excl. Milk)		57,723.	434.
NET COST OF PRODUCING MILK		$341,288.	$2,566.
Number of Cows	(#)	133	1
Total Litres of Milk Sold	(L)	745,536	5,606
Price Received per HL	($)	43.02	43.02
Cost of Producing Milk per HL	($)	45.78	45.78
NET RETURN PER HL	($)	-(2.76)	$-(2.76)

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PRODUCTION ANALYSIS

The average number of cows maintained per farm was 133 for farms in this group. Average production per cow was 5,606 litres of milk sold (12,726 pounds).

Purchased dairy feed was the largest expense item averaging $12.96 per hectolitre of milk sold. In percentage terms, feed accounted for 27.75 percent of Total Cost or 30.12 percent of Milk Sales.

On comsumption terms, each cow consumed an average of 3,051 kilograms of feed to produce 5,606 litres of milk.

TABLE E-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	133	1
Total Litres of Milk Sold	(L)	745,536	5,606
Value of Milk Sold	($)	320,731	2,412
Price Received per HL Milk	($)	43.02	43.02
Fluid Milk (L's as % of Total Milk)	(%)	57.9	57.9
Fluid Milk ($'s as % of Total Milk)	(%)	61.1	61.1
Cost of Dairy Feed	($)	96,602	726
Feed Cost per HL Milk Sold	($)	12.96	12.96
Feed Cost As % of Total Cost	(%)	27.75	27.75
Feed Cost as % of Milk Sales	(%)	30.12	30.12
Kilograms of Feed/HL Milk	(Kgs)	54.4	54.4
Kilograms of Feed	(Kgs)	405,817	3,051
Pounds of Feed	(Lbs)	921,204	6,926

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BALANCE SHEET

The balance sheet is one of the basic financial statements of any business. It provides a measure of the financial strength of a business at a particular point in time.

ASSETS are items of value owned by the business.

LIABILITIES are debts owed by the business to others.

EQUITY OR NET WORTH is the difference between Assets and Liabilities and represents the value of the owners contribution to the Total Capital of the business.

For farms in this group, Assets averaged $484,943. per farm or $3,646. on a per cow basis, while Liabilities averaged $229,749. per farm or $1,727. per cow. Equity, the difference between Assets and Liabilities averaged $255,194. per farm or $1,919. on a per cow basis.

TABLE E-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 61,183.	$ 460.
" " - Buildings	92,074.	692.
" " - Machinery	109,658.	824.
" " - Livestock	150,350.	1,130.
" " - Crops & Supplies	24,677.	186.
" " - Milk Quota	18,320.	138.
" " - Acct's Receivable	28,681.	216.
TOTAL INVENTORY VALUE - ASSETS	$484,943.	$3,646.
LIABILITIES:		
Short Term	$ 19,065.	$ 143.
Intermediate Term	43,285.	325.
Long Term	167,399.	1,259.
TOTAL LIABILITIES	$229,749.	$1,727.
EQUITY OR NET WORTH	$255,194.	$1,919.

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BALANCE SHEET ANALYSIS

Equity for farms in this group averaged 52.6 percent, with a return to equity of 3.9 percent being achieved. Return to total capital was 6.9 percent.

Capital turnover was achieved in 1.26 years for these farms.

Current ratio averaged $2.80 while Total Assets to Total Liabilities averaged $2.11.

Debt to Equity ratio was $0.90 indicating more equity dollars than debt capital.

TABLE E-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	52.6
Return on Equity	(%)	3.9
Return on Invested Capital	(%)	6.9
Capital Turnover	(Yrs)	1.26
Current Assets/Current Liabilities	($)	2.80
Total Assets/Total Liabilities	($)	2.11
Total Liabilities/Equity	($)	0.90

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LABOR ANALYSIS

The labor requirement for farms in this group averaged 4.97 man equivalents per farm. Of this amount, 1.84 man equivalents were operator and family and 3.13 man equivalents were hired labor.

For each man equivalent, 27 cows were maintained producing 150,007 litres of milk for sale, worth an estimated $64,533.00.

TABLE E-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	133
Operator & Family Man Equivalents	(#)	1.84
Hired Man Equivalents	(#)	3.13
Total Man Equivalents	(#)	4.97
Cows per Man Equivalent	(#)	27
Milk Sold per Man Equivalent	(L)	150,007
Milk Sold per Man Equivalent	($)	64,533
Labor Income per Man Equivalent Operator & Unpaid Family	($)	2,617

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ANALYSIS OF EXPENSES

An analysis of the expenses for this group of farms indicates that purchased dairy feed is the largest single expense item accounting for 27.8 percent of Total Farm Expenses. Feed was followed by Depreciation at 12.1 percent, Miscellaneous at 9.7 percent, Hired Labor at 9.5 percent, Crop Expenses at 8.2 percent and Interest at 6.7 percent of Total Farm Expenses.

TABLE E-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 82.	3.1 %
Dairy Feed	726.	27.8
Livestock Purchases	41.	1.6
Vet & Drugs	26.	1.0
Breeding	27.	1.0
Dairy Supplies	53.	2.0
Milk Marketing	129.	4.9
Crop Expenses	216.	8.2
Building & Fence Repairs	45.	1.7
Utilities	54.	2.1
Tractor & Machinery Expenses	157.	6.0
Truck & Auto Expenses	30.	1.1
Interest	175.	6.7
Hired Labor	250.	9.5
Taxes	11.	0.4
Insurance	28.	1.1
Miscellaneous	253.	9.7
Depreciation	316.	12.1
TOTAL EXPENSES	$2,618.	100.0 %

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RECEIPTS AND EXPENSES SUMMARY

Information presented in this section is on a per cow, per hectolitre and per hundredweight milk sold basis.

TABLE E-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER HECTOLITRE	PER CWT
RECEIPTS:			
Fluid Milk Sales	$1,474.	$ 26.30	$11.59
Manufactured Milk Sales	794.	14.16	6.24
Milk Subsidies	144.	2.56	1.13
Livestock Sales	210.	3.75	1.65
Crop Sales	61.	1.08	0.47
Miscellaneous Sales	163.	2.91	1.28
TOTAL FARM RECEIPTS	$2,846.	$ 50.76	$22.36
Adj. for Inventory Change	$ 38.	$ 0.69	$ 0.30
TOTAL FARM INCOME	$2,884.	$ 51.45	$22.66
EXPENSES:			
Milk Hauling	$ 82.	$ 1.46	$ 0.64
Dairy Feed	726.	12.96	5.71
Livestock Purchases	41.	0.72	0.32
Vet & Drugs	26.	0.47	0.21
Breeding	27.	0.47	0.21
Dairy Supplies	53.	0.94	0.41
Milk Marketing	129.	2.30	1.01
Crop Expenses	216.	3.85	1.70
Building & Fence Repairs	45.	0.81	0.36
Utilities	54.	0.96	0.42
Tractor & Machinery Expenses	157.	2.80	1.23
Truck & Auto Expenses	30.	0.53	0.23
Interest	175.	3.13	1.38
Hired Labor	250.	4.45	1.96
Taxes	11.	0.19	0.08
Insurance	28.	0.49	0.22
Miscellaneous	253.	4.52	1.99
TOTAL CASH EXPENSES	$2,302.	$ 41.07	$18.09
Depreciation	$ 316.	$ 5.63	$ 2.48
TOTAL FARM EXPENSES	$2,618.	$ 46.70	$20.57
NET FARM INCOME	$ 266.	$ 4.75	$ 2.09

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Section F

Analysis of

All Farms

RECEIPTS

Total Farm Receipts for all farms in the study averaged $176,500. per farm or $2,800. on a per cow basis. These farms were highly specialized dairy farms with 85.1 percent of Farm Receipts accounted for from the sale of milk and milk subsidies.

Livestock Sales accounted for 7.3 percent of Farm Receipts while Crop Sales averaged 1.4 percent and Miscellaneous Sales 6.2 percent.

TABLE F-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$100,400.	$1,593.
Manufactured Milk Sales	42,899.	680.
Milk Subsidies	6,912.	110.
Livestock Sales	12,793.	203.
Crop Sales	2,547.	40.
Miscellaneous Sales	10,948.	174.
TOTAL FARM RECEIPTS	$176,500.	$2,800.

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EXPENSES

For the overall average, Cash Expenses were $142,477. per farm or $2,260. on a per cow basis.

Purchased dairy feed was the largest expense item amounting to $44,272. per farm or $702. on a per cow basis. Feed, therefore, represented 31.1 percent of Cash Expenses and was followed by Interest at 9.4 percent, Hired Labor at 9.1 percent, Miscellaneous at 8.8 percent and Crop Expenses at 8.4 percent.

TABLE F-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 5,333.	$ 85.
Dairy Feed	44,272.	702.
Livestock Purchased	3,296.	52.
Vet & Drugs	1,707.	27.
Breeding	1,587.	25.
Dairy Supplies	3,676.	58.
Milk Marketing	7,258.	115.
Crop Expenses	11,923.	189.
Building & Fence Repairs	3,656.	58.
Utilities	4,433.	70.
Tractor & Machinery Expense	10,517.	167.
Truck & Auto Expense	2,512.	40.
Interest	13,452.	213.
Hired Labor	13,012.	206.
Taxes	897.	14.
Insurance	2,437.	39.
Miscellaneous	12,506.	198.
TOTAL CASH EXPENSES	$142,477.	$2,260.

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INCOME SUMMARY

When analyzing a farm business, different measures of income are often used to provide the analyst with information about the business. In this section, three (3) of those measures are presented.

NET CASH INCOME is the difference between Farm Receipts and Cash Expenses. For the total group, Net Cash Income averaged $34,023. per farm or $540. per cow.

NET FARM INCOME adjusts Net Cash Income for inventory change and depreciation. Net Farm Income represents that amount left for the Operator for his labor and management skills and for his equity capital. Net Farm Income for all farms in the study averaged $14,493. per farm or $230. per cow.

LABOR AND MANAGEMENT INCOME is a further refinement of income by making adjustments for unpaid family labor and return on Equity Capital. The result is the return to the operator for his labor and management skills. For the total group, Labor and Management Income was $1,121. per farm or $18. per cow.

TABLE F-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$176,500.	$2,800.
Total Cash Expenses	142,477.	2,260.
NET CASH INCOME	$ 34,023.	$ 540.
Plus: Inventory Change	$ 1,415.	$ 22.
Less: Depreciation	20,945.	332.
NET FARM INCOME	$ 14,493.	$ 230.
Less: Value of Unpaid Family Labor	$ 588.	$ 9.
Interest on Equity @ 12%	12,784.	203.
LABOR AND MANAGEMENT INCOME	$ 1,121.	$ 18.

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NET COST OF PRODUCTION

For all farms in the summary, the average cost of producing milk was $46.93 per hectolitre or $163,252. per farm.

The return from the sale of milk was $43.18, leaving a net return over costs of $-(3.75) per hectolitre.

If operator labor was excluded from the costs, the net cost would then have been $42.86. A net return over costs of $0.32 per hectolitre would have been achieved and this amount would have been the return to the operator for his labor and management skills.

TABLE F-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$142,477.	$2,260.
Plus: Depreciation		20,945.	332.
Inventory Change		-(1,415.)	-(22.)
Interest on Equity @ 12%		12,784.	203.
Value of Unpaid Family Labor		588.	9.
Operator Labor		14,161.	225.
Less: Sales (Excl. Milk)		26,289.	417.
NET COST OF PRODUCING MILK		$163,252.	$2,590.
Number of Cows	(#)	63	1
Total Litres of Milk Sold	(L)	347,854	5,518
Price Received per HL	($)	43.18	43.18
Cost of Producing Milk per HL	($)	46.93	46.93
NET RETURN PER HL	($)	$-(3.75)	$-(3.75)

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PRODUCTION ANALYSIS

For the total group in the summary, the average number of cows maintained was 63, with milk production for sale of 347,854 litres or 5,518 litres per cow. This milk was worth $150,211. for an average price received of $43.18.

Feed, the largest single expense item, accounted for 27.1 percent of total costs or 29.5 percent of milk sales. For each cow maintained, 2,787 kilograms of feed were purchased.

TABLE F-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	63	1
Total Litres of Milk Sold	(L)	347,854	5,518
Value of Milk Sold	($)	150,211	2,383
Price Received per HL Milk	($)	43.18	43.18
Fluid Milk (L's as % of Total Milk)	(%)	63.7	63.7
Fluid Milk ($'s as % of Total Milk)	(%)	66.8	66.8
Cost of Dairy Feed	($)	44,272	702
Feed Cost per HL Milk Sold	($)	12.73	12.73
Feed Cost as % of Total Cost	(%)	27.1	27.1
Feed Cost as % of Milk Sales	(%)	29.5	29.5
Kilograms of Feed/HL Milk	(Kgs)	50.52	50.52
Kilograms of Feed	(Kgs)	175,732	2,787
Pounds of Feed	(Lbs)	398,912	6,328

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BALANCE SHEET

The Balance Sheet provides information about the financial strength of the business at a specific point in time. The three (3) main parts are:

ASSETS which are all items of value owned by the business.

LIABILITIES which are debts the business owes to others.

EQUITY OR NET WORTH which is the difference between Assets and Liabilities and represents the owners contribution to the Total Capital of the business.

For the total group, Assets amounted to $259,153. per farm or $4,110. per cow, while Liabilities averaged $152,615 per farm or $2,420. per cow. Equity, the difference between Assets and Liabilities averaged $106,537. per farm or $1,690. on a per cow basis.

TABLE F-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 36,071.	$ 572.
" " - Buildings	55,350.	878.
" " - Machinery	50,817.	806.
" " - Livestock	74,577.	1,183.
" " - Crops & Supplies	13,754.	218.
" " - Milk Quota	11,558.	183.
" " - Acct's Receivable	17,025.	270.
TOTAL INVENTORY VALUE - ASSETS	$259,153.	$4,110.
LIABILITIES:		
Short Term	$ 12,380.	$ 196.
Intermediate Term	24,914.	395.
Long Term	115,322.	1,829.
TOTAL LIABILITIES	$152,616.	$2,420.
EQUITY OR NET WORTH	$106,537.	$1,690.

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BALANCE SHEET ANALYSIS

When all farms were combined, equity averaged 41.1 percent of total capital investment. There was a -0- return to equity capital, while Total Capital received a 5.1 percent return.

Capital turnover was calculated to be 1.46 years.

Current ratio was $2.49, while Total Assets to Total Liabilities ratio was $1.70.

Debt to Equity ratio averaged $1.43 when all farms were combined.

TABLE F-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	41.1
Return on Equity	(%)	-0-
Return on Invested Capital	(%)	5.1
Capital Turnover	(Yrs)	1.46
Current Assets/Current Liabilities	($)	2.49
Total Assets/Total Liabilities	($)	1.70
Total Liabilities/Equity	($)	1.43

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LABOR ANALYSIS

When all farms in the summary are combined into one group, the labor requirement per farm averaged 2.5 man equivalents. This labor requirement was made up of 1.28 operator and family and 1.22 hired man equivalents.

For each man equivalent, 25 cows were maintained, producing 139,142 litres of milk for sale worth $60,082.00.

TABLE F-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	63
Operator & Family Man Equivalents	(#)	1.28
Hired Man Equivalents	(#)	1.22
Total Man Equivalents	(#)	2.50
Cows per Man Equivalent	(#)	25
Milk Sold per Man Equivalent	(L)	139,142
Milk Sold per Man Equivalent	($)	60,082
Labor Income per Man Equivalent Operator & Unpaid Family	($)	1,335

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ANALYSIS OF EXPENSES

A review of the costs associated with producing milk indicates that, at the Net Farm Income level, purchased dairy feed accounted for 27.1 percent of Total Expenses. Feed was followed by Depreciation at 12.8 percent, Interest at 8.2 percent, Hired Labor at 8.0 percent, Miscellaenous at 7.7 percent and Crop Expenses at 7.3 percent of Total Expenses.

TABLE F-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 85.	3.3 %
Dairy Feed	702.	27.1
Livestock Purchases	52.	2.0
Vet & Drugs	27.	1.0
Breeding	25.	1.0
Dairy Supplies	58.	2.3
Milk Marketing	115.	4.4
Crop Expenses	189.	7.3
Building & Fence Repairs	58.	2.2
Utilities	70.	2.7
Tractor & Machinery Expenses	167.	6.4
Truck & Auto Expenses	40.	1.5
Interest	213.	8.2
Hired Labor	206.	8.0
Taxes	14.	0.6
Insurance	39.	1.5
Miscellaneous	198.	7.7
Depreciation	332.	12.8
TOTAL EXPENSES	$2,592.	100.0 %

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RECEIPTS AND EXPENSES SUMMARY

Figures contained on this page provide information on the combined group on a per cow, per hectolitre and per hundredweight milk sold basis.

TABLE F-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER HECTOLITRE	PER CWT
RECEIPTS:			
Fluid Milk Sales	$1,593.	$ 28.86	$12.71
Manufactured Milk Sales	680.	12.33	5.43
Milk Subsidies	110.	1.99	0.88
Livestock Sales	203.	3.68	1.62
Crop Sales	40.	0.73	0.32
Miscellaneous Sales	174.	3.15	1.39
TOTAL FARM RECEIPTS	$2,800.	$ 50.74	$22.35
Adj. for Inventory Change	$ 22.	$ 0.41	$ 0.18
TOTAL FARM INCOME	$2,822.	$ 51.15	$22.53
EXPENSES:			
Milk Hauling	$ 85.	$ 1.53	$ 0.67
Dairy Feed	702.	12.73	5.61
Livestock Purchases	52.	0.95	0.42
Vet & Drugs	27.	0.49	0.22
Breeding	25.	0.46	0.20
Dairy Supplies	58.	1.06	0.47
Milk Marketing	115.	2.09	0.92
Crop Expenses	189.	3.43	1.51
Building & Fence Repairs	58.	1.05	0.46
Utilities	70.	1.27	0.56
Tractor & Machinery Expenses	167.	3.02	1.33
Truck & Auto Expenses	40.	0.72	0.32
Interest	213.	3.87	1.70
Hired Labor	206.	3.74	1.65
Taxes	14.	0.26	0.11
Insurance	39.	0.70	0.31
Miscellaneous	198.	3.60	1.59
TOTAL CASH EXPENSES	$2,260.	$ 40.96	$18.04
Depreciation	$ 332.	$ 6.02	$ 2.65
TOTAL FARM EXPENSES	$2,592.	$ 46.98	$20.69
NET FARM INCOME	$ 230.	$ 4.17	$ 1.84

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Section G

Production Per Cow Analysis

In the management of a business, output per unit of input is one of the key elements to the success of that business. In the dairy business, production per farm, or more particularily, production per cow is one of the key factors determining the profitability of the farm business.

In this section of our summary, we have divided the one hundred and fifteen (115) farms into three (3) groups based on production levels per cow. These groups are - (1) the high 25 percent production per cow farms, (2) the middle 50 percent production per cow farms, and (3) the low 25 percent production per cow farms.

Assumptions regarding interest on equity, operator and unpaid family labor were the same as used throughout this summary.

Table G-1 provides information on a per farm basis, while Table G-2 provides this same data on a per cow basis.

A review of the information contained in the two (2) tables reveals that the high production farms were closest to receiving a return to all factors of production. The high production group realized a return short of all costs of $-(3.02), while the low production group was short by $-(4.81) on a per hectolitre basis.

The high production group averaged 6,577 litres of milk per cow compared to 4,438 litres for the low producing farms.

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TABLE G-1

HIGH, MEDIUM AND LOW PRODUCTION PER COW FARMS

PER FARM ANALYSIS

ITEM	HIGH PROD./COW	MEDIUM PROD./COW	LOW PROD./COW
RECEIPTS:			
Fluid Milk Sales	$130,488.	$ 97,051.	$ 76,894.
Manufactured Milk Sales	50,902.	41,845.	36,969.
Milk Subsidies	7,665.	6,904.	6,177.
Livestock Sales	16,779.	10,951.	12,430.
Crop Sales	4,340.	1,600.	2,615.
Miscellaneous Sales	11,617.	9,484.	13,158.
TOTAL FARM RECEIPTS	$221,791.	$167,834.	$148,242.
EXPENSES:			
Milk Hauling	$ 6,919.	$ 5,101.	$ 4,204.
Dairy Feed	57,024.	43,620.	32,803.
Livestock Purchases	4,008.	3,268.	2,642.
Vet & Drugs	2,642.	1,542.	1,096.
Breeding	2,327.	1,503.	1,013.
Dairy Supplies	4,586.	3,562.	2,989.
Milk Marketing	8,797.	6,645.	6,926.
Crop Expenses	14,571.	11,523.	10,060.
Building Repairs	4,726.	3,421.	3,045.
Utilities	5,018.	4,180.	4,347.
Tractor & Machinery Expense	12,549.	10,164.	9,177.
Truck & Auto Expense	2,737.	2,349.	2,607.
Interest	13,511.	14,389.	11,551.
Hired Labor	18,868.	10,538.	12,021.
Taxes	1,091.	811.	873.
Insurance	2,937.	2,318.	2,172.
Miscellaneous	13,132.	11,440.	13,977.
TOTAL CASH EXPENSES	$175,444.	$136,375.	$121,504.

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TABLE G-1 (Cont'd)

HIGH, MEDIUM AND LOW PRODUCTION PER COW FARMS

PER FARM ANALYSIS

ITEM		HIGH PROD./COW	MEDIUM PROD./COW	LOW PROD./COW
Plus: Depreciation		$ 26,160.	$ 19,402.	$ 18,763.
Inventory Change		-(1,313.)	-(483.)	-(3,348.)
TOTAL FARM EXPENSES		$200,291.	$155,294.	$136,919.
NET FARM INCOME		$ 21,500.	$ 12,540.	$ 11,324.
Total Farm Expenses		$200,291.	$155,294.	$136,919.
Plus: Interest on Equity		17,995.	11,328.	10,436.
Value of Unpaid Family Labor		884.	450.	564.
Operator Labor		15,971.	13,614.	13,495.
Less: Sales (Excl. Milk)		32,736.	22,035.	28,202.
NET COST OF PRODUCING MILK		$202,405.	$158,651.	$133,212.
Number of Farms	(#)	29	57	29
Number of Cows/Farm	(#)	67	62	62
Litres of Milk/Farm	(L)	442,444	337,400	273,812
Price of Milk/HL	($)	42.73	43.21	43.84
Cost of Producing Milk/HL	($)	45.75	47.02	48.65
NET RETURN/HL	($)	-(3.02)	-(3.81)	-(4.81)
Feed Cost/HL Milk Sold	($)	12.89	12.40	11.98
Feed Cost as % of Total Costs	(%)	28.3	24.9	23.4
Feed Cost as % of Milk Sales	(%)	30.2	29.9	27.3
Kilograms of Feed/HL Milk Sold	(Kgs)	50.5	51.1	49.3

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TABLE G-2

HIGH, MEDIUM AND LOW PRODUCTION PER COW FARMS

PER COW ANALYSIS

ITEM	HIGH PROD./COW	MEDIUM PROD./COW	LOW PROD./COW
RECEIPTS:			
Fluid Milk Sales	$ 1,940.	$ 1,576.	$ 1,247.
Manufactured Milk Sales	757.	680.	599.
Milk Subsidies	114.	112.	100.
Livestock Sales	249.	178.	202.
Crop Sales	64.	26.	42.
Miscellaneous Sales	173.	154.	213.
TOTAL FARM RECEIPTS	$ 3,297.	$ 2,726.	$ 2,403.
EXPENSES:			
Milk Hauling	$ 103.	$ 83.	$ 68.
Dairy Feed	848.	708.	532.
Livestock Purchases	60.	53.	43.
Vet & Drugs	39.	25.	18.
Breeding	35.	24.	16.
Dairy Supplies	68.	58.	48.
Milk Marketing	131.	108.	112.
Crop Expenses	217.	187.	163.
Building Repairs	70.	56.	49.
Utilities	75.	68.	70.
Tractor & Machinery Expense	187.	165.	148.
Truck & Auto Expense	41.	38.	42.
Interest	201.	234.	187.
Hired Labor	280.	171.	195.
Taxes	16.	13.	14.
Insurance	44.	38.	35.
Miscellaneous	195.	186.	227.
TOTAL CASH EXPENSES	$ 2,608.	$ 2,215.	$ 1,970.

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TABLE G-2 (Cont'd)

HIGH, MEDIUM AND LOW PRODUCTION PER COW FARMS

PER COW ANALYSIS

ITEM		HIGH PROD./COW	MEDIUM PROD./COW	LOW PROD./COW
Plus: Depreciation		$ 389.	$ 315.	$ 304.
Inventory Change		-(20.)	-(8.)	-(54.)
TOTAL FARM EXPENSES		$ 2,977.	$ 2,522.	$ 2,220.
NET FARM INCOME		$ 320.	$ 204.	$ 183.
Total Farm Expenses		$ 2,608.	$ 2,522.	$ 2,220.
Plus: Interest on Equity		267.	184.	169.
Value of Unpaid Family Labor		13.	7.	9.
Operator Labor		237.	221.	219.
Less: Sales (Excl. Milk)		487.	358.	457.
NET COST OF PRODUCING MILK		$ 3,009.	$ 2,576.	$ 2,159.
Number of Farms	(#)	29	57	29
Number of Cows/Farm	(#)	67	62	62
Litres of Milk/Cow	(L)	6,577	5,479	4,438
Price of Milk/HL	($)	42.73	43.21	43.84
Cost of Producing Milk/HL	($)	45.75	47.02	48.65
NET RETURN/HL	($)	-(3.02)	-(3.81)	-(4.81)
Feed Cost/HL Milk Sold	($)	12.89	12.40	11.98
Feed Cost as % of Total Costs	(%)	28.3	24.9	23.4
Feed Cost as % of Milk Sales	(%)	30.2	29.9	27.3
Kilograms of Feed/HL Milk Sold	(Kgs)	50.5	51.1	49.3

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Section H

Investment Per Cow Analysis

Another key factor in determining the profitability of a business is the level of capital investment in the business. In this section of the summary, the one hundred and fifteen (115) farms have been re-organized into three groups based on the level of investment per cow. These groupings were - (1) the high 25 percent investment per cow farms, (2) the middle 50 percent investment per cow farms and (3) the low 25 percent investment per cow farms.

Similar assumptions regarding interest on equity, operator and family labor were made for this section as were made throughout this summary.

Table H-1 provides data on a per farm basis while Table H-2 provides data on a per cow basis.

The information contained in the tables reveals that low investment per cow farms achieved a much higher return to operator labor and capital and to total capital than did either of the other groups. As will be noted, no group received a return high enough to cover all costs at the assumed levels.

Investment per cow averaged $2,655. for the low group and $5,899. for the high group.

All groups received a return to total investment ranging from 3.5 percent for the high group to 7.7 percent for the low group.

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TABLE H-1

HIGH, MEDIUM AND LOW INVESTMENT PER COW FARMS

PER FARM BASIS

ITEM	HIGH INVEST./COW	MEDIUM INVEST./COW	LOW INVEST./COW
RECEIPTS:			
Fluid Milk Sales	$ 103,230.	$ 100,319.	$ 97,728.
Manufactured Milk Sales	44,093.	40,231.	46,949.
Milk Subsidies	7,267.	6,172.	8,013.
Livestock Sales	13,385.	11,449.	14,845.
Crop Sales	3,119.	2,737.	1,601.
Miscellaneous Sales	11,636.	11,184.	9,797.
TOTAL FARM RECEIPTS	$ 182,731.	$ 172,091.	$ 178,933.
EXPENSES:			
Milk Hauling	$ 5,504.	$ 5,256.	$ 5,315.
Dairy Feed	44,551.	42,943.	46,607.
Livestock Purchases	4,191.	3,053.	2,880.
Vet & Drugs	1,827.	1,848.	1,310.
Breeding	2,038.	1,407.	1,491.
Dairy Supplies	3,850.	3,463.	3,921.
Milk Marketing	7,173.	6,965.	7,920.
Crop Expenses	12,487.	11,956.	11,293.
Building Repairs	3,572.	3,911.	3,237.
Utilities	4,441.	4,600.	4,097.
Tractor & Machinery Expense	11,664.	10,421.	9,558.
Truck & Auto Expense	2,357.	2,668.	2,360.
Interest	17,154.	13,041.	10,556.
Hired Labor	12,855.	12,862.	13,466.
Taxes	892.	989.	722.
Insurance	2,680.	2,545.	1,983.
Miscellaneous	10,752.	12,516.	14,242.
TOTAL CASH EXPENSES	$ 147,987.	$ 140,445.	$ 140,960.

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TABLE H-1 (Cont'd)

HIGH, MEDIUM AND LOW INVESTMENT PER COW FARMS

PER FARM BASIS

ITEM		HIGH INVEST./COW	MEDIUM INVEST./COW	LOW INVEST./COW
Plus: Depreciation		$ 23,803.	$ 20,675.	$ 18,618.
Inventory Change		468.	-(3,600.)	998.
TOTAL FARM EXPENSES		$ 172,258.	$ 157,520.	$ 160,576.
NET FARM INCOME		$ 10,474.	$ 14,571.	$ 18,358.
Total Farm Expenses		$ 172,258.	$ 157,520.	$ 160,576.
Plus: Interest on Equity		17,497.	12,296.	9,032.
Value of Unpaid Family Labor		940.	378.	649.
Operator Labor		14,438.	14,073.	14,053.
Less: Sales (Excl. Milk)		28,141.	25,369.	26,243.
NET COST OF PRODUCING MILK		$ 176,991.	$ 158,898.	$ 158,065.
Number of Farms	(#)	29	57	29
Number of Cows/Farm	(#)	59	62	69
Litres of Milk/Farm	(L)	357,154	339,112	355,736
Price of Milk/HL	($)	43.28	43.27	42.92
Cost of Producing Milk/HL	($)	49.56	46.86	44.43
NET RETURN/HL	($)	-(6.27)	-(3.59)	-(1.51)
Feed Cost/HL Milk Sold	($)	12.47	12.66	13.10
Ave. Investment/Farm	($)	347,811	252,369	183,828
Equity in Business	(%)	41.9	40.6	40.9
Return on Equity	(%)	-0-	0.1	4.9
Return on Invested Capital	(%)	3.5	5.2	7.7

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TABLE H-2

HIGH, MEDIUM AND LOW INVESTMENT PER COW FARMS

PER COW BASIS

ITEM	HIGH INVEST./COW	MEDIUM INVEST./COW	LOW INVEST./COW
RECEIPTS:			
Fluid Milk Sales	$ 1,751.	$ 1,619.	$ 1,411.
Manufactured Milk Sales	748.	649.	678.
Milk Subsidies	123.	100.	116.
Livestock Sales	227.	185.	214.
Crop Sales	53.	44.	23.
Miscellaneous Sales	197.	180.	142.
TOTAL FARM RECEIPTS	$ 3,099.	$ 2,777.	$ 2,584.
EXPENSES:			
Milk Hauling	$ 93.	$ 85.	$ 77.
Dairy Feed	756.	693.	673.
Livestock Purchases	71.	49.	42.
Vet & Drugs	31.	30.	19.
Breeding	35.	23.	22.
Dairy Supplies	65.	56.	57.
Milk Marketing	122.	112.	114.
Crop Expenses	212.	193.	163.
Building Repairs	61.	63.	47.
Utilities	75.	74.	59.
Tractor & Machinery Expense	198.	168.	138.
Truck & Auto Expense	40.	43.	34.
Interest	291.	210.	152.
Hired Labor	218.	208.	194.
Taxes	15.	16.	10.
Insurance	45.	41.	29.
Miscellaneous	182.	202.	206.
TOTAL CASH EXPENSES	$ 2,510.	$ 2,267.	$ 2,036.

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TABLE H-2 (Cont'd)

HIGH, MEDIUM AND LOW INVESTMENT PER COW FARMS

PER COW BASIS

ITEM		HIGH INVEST./COW	MEDIUM INVEST./COW	LOW INVEST./COW
Plus: Depreciation		$ 404.	$ 334.	$ 269.
Inventory Change		8.	-(58.)	14.
TOTAL FARM EXPENSES		$ 2,922.	$ 2,543.	$ 2,319.
NET FARM INCOME		$ 178.	$ 235.	$ 265.
Total Farm Expenses		$ 2,922.	$ 2,543.	$ 2,319.
Plus: Interest on Equity		297.	198.	130.
Value of Unpaid Family Labor		16.	6.	9.
Operator Labor		245.	227.	203.
Less: Sales (Excl. Milk)		477.	409.	379.
NET COST OF PRODUCING MILK		$ 3,002.	$ 2,564.	$ 2,283.
Number of Farms	(#)	29	57	29
Number of Cows/Farm	(#)	59	62	69
Litres of Milk/Cow	(L)	6,057	5,473	5,138
Price of Milk/HL	($)	43.28	43.27	42.92
Cost of Producing Milk/HL	($)	49.56	46.86	44.43
NET RETURN/HL	($)	-(6.27)	-(3.59)	-(1.51)
Feed Cost/HL Milk Sold	($)	12.47	12.66	13.10
Ave. Investment/Cow	($)	5,899	4,073	2,655
Equity in Business	(%)	41.9	40.6	40.9
Return on Equity	(%)	-0-	0.1	4.9
Return on Invested Capital	(%)	3.5	5.2	7.7

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Section I

Net Farm Income

Analysis

A key factor studied when analyzing a farm business is the Net Farm Income generated by the Business. This factor represents the return to the Operator for his labor and management skills and also provides a return for his equity capital.

The one hundred and fifteen (115) farms in this summary were re-organized into three groupings based on Net Farm Income per Cow. These groups were - (1) the high 25 percent Net Farm Income per Cow farms, (2) the middle 50 percent Net Farm Income per Cow farms, and (3) the low 25 percent Net Farm Income per Cow farms.

Similar assumptions regarding interest on equity, operator and family labor were made for this section as were made throughout this summary.

Table I-1 provides data on a per farm basis, while Table I-2 provides the data on a per cow basis.

A review of the tables shows that the high Net Farm Income per cow farms received a return to all factors of production at the assumed levels. The middle and low groups did not receive a return sufficient to meet all costs.

The high Net Farm Income per cow group received a return to Equity Capital of 13.6 percent, while an 11.7 return to Total Capital was achieved.

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TABLE I-1

HIGH, MEDIUM AND LOW NET FARM INCOME PER COW FARMS

PER FARM ANALYSIS

ITEM	HIGH N.F.I./COW	MEDIUM N.F.I./COW	LOW N.F.I./COW
RECEIPTS:			
Fluid Milk Sales	$ 111,027.	$ 105,655.	$ 79,442.
Manufactured Milk Sales	50,786.	43,042.	34,732.
Milk Subsidies	8,451.	6,706.	5,779.
Livestock Sales	13,215.	13,029.	11,909.
Crop Sales	1,362.	3,992.	893.
Miscellaneous Sales	10,572.	11,440.	10,358.
TOTAL FARM RECEIPTS	$ 195,414.	$ 183,863.	$ 143,112.
EXPENSES:			
Milk Hauling	$ 6,269.	$ 5,346.	$ 4,373.
Dairy Feed	49,416.	45,349.	37,014.
Livestock Purchases	2,098.	3,531.	4,034.
Vet & Drugs	1,872.	1,661.	1,633.
Breeding	2,094.	1,475.	1,301.
Dairy Supplies	4,186.	3,511.	3,491.
Milk Marketing	7,483.	7,788.	5,992.
Crop Expenses	12,258.	13,602.	8,288.
Building Repairs	2,983.	3,744.	4,155.
Utilities	3,888.	4,750.	4,356.
Tractor & Machinery Expense	9,221.	11,232.	10,407.
Truck & Auto Expense	2,329.	2,335.	3,042.
Interest	8,095.	14,381.	16,982.
Hired Labor	13,715.	14,199.	9,977.
Taxes	811.	940.	898.
Insurance	2,025.	2,412.	2,899.
Miscellaneous	10,800.	14,460.	10,373.
TOTAL CASH EXPENSES	$ 139,544.	$ 150,716.	$ 129,215.

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TABLE I-1 (Cont'd)

HIGH, MEDIUM AND LOW NET FARM INCOME PER COW FARMS

PER FARM ANALYSIS

ITEM		HIGH N.F.I./COW	MEDIUM N.F.I./COW	LOW N.F.I./COW
Plus: Depreciation		$ 19,782.	$ 21,496.	$ 21,027.
Inventory Change		-(5,129.)	-(1,113.)	1,706.
TOTAL FARM EXPENSES		$ 154,197.	$ 171,099.	$ 151,948.
NET FARM INCOME		$ 41,217.	$ 12,765.	$ -(8,835.)
Total Farm Expenses		$ 154,197.	$ 171,099.	$ 151,948.
Plus: Interest on Equity		21,724.	11,854.	5,673.
Value of Unpaid Family Labor		1,194.	344.	461.
Operator Labor		15,396.	14,272.	12,732.
Less: Sales (Excl. Milk)		25,149.	28,460.	23,160.
NET COST OF PRODUCING MILK		$ 167,362.	$ 169,109.	$ 147,654.
Number of Farms	(#)	29	57	29
Number of Cows/Farm	(#)	66	66	54
Litres of Milk/Farm	(L)	395,687	358,387	279,320
Price of Milk/HL	($)	43.03	43.36	42.94
Cost of Producing Milk/HL	($)	42.30	47.19	52.86
NET RETURN/HL	($)	0.73	-(3.82)	-(9.92)
Feed Cost/HL Milk Sold	($)	12.49	12.65	13.25
Equity in Business	(%)	64.7	37.9	20.1
Return on Equity	(%)	13.6	-0-	-0-
Return on Invested Capital	(%)	11.7	4.8	-0-
Investment/Farm	($)	280,000	260,637	235,390
Liabilities/Farm	($)	98,966	161,851	188,111

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TABLE I-2

HIGH, MEDIUM AND LOW NET FARM INCOME PER COW FARMS

PER COW ANALYSIS

ITEM	HIGH N.F.I./COW	MEDIUM N.F.I./COW	LOW N.F.I./COW
RECEIPTS:			
Fluid Milk Sales	$ 1,686.	$ 1,590.	$ 1,484.
Manufactured Milk Sales	771.	648.	649.
Milk Subsidies	128.	101.	108.
Livestock Sales	201.	196.	223.
Crop Sales	21.	60.	17.
Miscellaneous Sales	160.	172.	193.
TOTAL FARM RECEIPTS	$ 2,967.	$ 2,767.	$ 2,674.
EXPENSES:			
Milk Hauling	$ 95.	$ 80.	$ 82.
Dairy Feed	750.	682.	692.
Livestock Purchases	32.	55.	75.
Vet & Drugs	28.	29.	30.
Breeding	32.	22.	24.
Dairy Supplies	64.	53.	65.
Milk Marketing	114.	117.	112.
Crop Expenses	186.	205.	155.
Building Repairs	45.	56.	78.
Utilities	59.	71.	81.
Tractor & Machinery Expense	140.	169.	194.
Truck & Auto Expense	3[illegible].	35.	57.
Interest	123.	216.	317.
Hired Labor	208.	214.	186.
Taxes	12.	14.	17.
Insurance	31.	36.	54.
Miscellaneous	164.	218.	194.
TOTAL CASH EXPENSES	$ 2,119.	$ 2,268.	$ 2,414.

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TABLE I-2 (Cont'd)

HIGH, MEDIUM AND LOW NET FARM INCOME PER COW FARMS

PER COW ANALYSIS

ITEM		HIGH N.F.I./COW	MEDIUM N.F.I./COW	LOW N.F.I./COW
Plus: Depreciation		$ 300.	$ 323.	$ 397.
Inventory Change		-(78.)	-(17.)	32.
TOTAL FARM EXPENSES		$ 2,341.	$ 2,574.	$ 2,839.
NET FARM INCOME		$ 626.	$ 192.	$ -(165.)
Total Farm Expenses		$ 2,341.	$ 2,574.	$ 2,839.
Plus: Interest on Equity		330.	178.	106.
Value of Unpaid Family Labor		18.	5.	9.
Operator Labor		234.	215.	238.
Less: Sales (Excl. Milk)		382.	428.	433.
NET COST OF PRODUCING MILK		$ 2,541.	$ 2,545.	$ 2,759.
Number of Farms	(#)	29	57	29
Number of Cows/Farm	(#)	66	66	64
Litres of Milk/Cow	(L)	6,008	5,393	5,219
Price of Milk/HL	($)	43.03	43.36	43.94
Cost of Producing Milk/HL	($)	42.30	47.19	52.86
NET RETURN/HL	($)	0.73	-(3.82)	-(9.92)
Feed Cost/HL Milk Sold	($)	12.49	12.65	13.25
Equity in Business	(%)	64.7	37.9	20.1
Return on Equity	(%)	13.6	-0-	-0-
Return on Invested Capital	(%)	11.7	4.8	-0-
Investment/Cow	($)	4,251	3,922	4,398
Liabilities/Cow	($)	1,503	2,435	3,515

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Section J

Summary

The 1982 Nova Scotia Dairy Farm Business Summary provides basic information and statistics on the costs and returns associated with the dairy enterprise on Nova Scotia farms. While not based on a statistically sound random sample of dairy farms, the summary can be used with care to assist in the analysis of the dairy enterprise by providing group average data for comparison purposes.

Table J-1 provides a brief summary of a number of cost and profit ratios and management factors that can be used when analysing a farm business. These ratios and management factors provide useful information about the financial and production strength of the farm business. Further, they can provide an indication of the weaknesses that may be present in the business.

In reviewing these ratios and management factors, the following points are worthy of comment.

- Capital Turnover was achieved in 1.46 years.
- Equity in the farm business varied widely, but averaged 41.1 percent.
- Return to equity was -0- for the total group, but significant variation was observed among farms.
- Return to total capital averaged 5.1 percent for all farms in the summary.

A review of the previous sections of this summary revealed that no groups achieved a return to all factors of production. The 100+ cow group came closest to achieving a return to all factors of production. When farms were re-organized by production per cow levels, the high production group came near achieving a return equal to all costs. Similarily, when farms were reclassified by investment per cow levels, the low investment group achieved the best results.

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Reclassification by Net Farm Income per cow for the farms in the study revealed that the high Net Farm Income per cow farms achieved a return greater than all costs by some $0.75 per hectolitre of milk sold.

In compiling data for this summary, extreme variation among farms was noted. The variation occurred in most factors, including returns, costs and management factors. Below, we outline a number of the variations observed.

- Net Farm Income had a range of $1,572. per cow between the highest and lowest net incomes on a per cow basis.
- Feed cost had a range of $12.99 per hectolitre of milk sold.
- There was a difference of 3,532 kilograms of feed fed per cow between the highest and lowest feed users.
- Production per cow varied as much as 5,303 litres (12,038 pounds) of milk sold per cow between the highest and lowest producing herds.
- Investment per cow varied as much as $7,628. between the highest and lowest investments on a per cow basis.
- Feed required to produce a hectolitre of milk varied as much as 56.7 kilograms.

With such wide variation in many of the returns, costs and management factors, it is difficult to isolate specific characteristics that result in a profitable dairy unit. It would appear, however, that a number of the key factors of production outlined above, such as production, cost control, efficient use of capital and labor, are of significant importance in determining the success of the farm unit.

Those farm operators who successfully combined these factors of production in the management and operation of their businesses achieved a reasonable return to their labor, capital and management skills.

TABLE J-1

COST AND PROFIT RATIOS

ITEM		20 - 39 COWS	40 - 59 COWS	60 - 99 COWS	100+ COWS	ALL FARMS
Number of Farms		25	43	32	15	115
Number of Cows/Farm		33	49	73	133	63
COST RATIOS:						
Variable Cost of % of Total Cost		64.9	64.7	64.0	68.3	65.6
Fixed Cost as % of Total Cost		21.7	19.6	21.4	17.7	19.9
Opportunity Cost as % of Total Cost		13.4	15.7	14.6	14.0	14.5
EARNINGS & SOLVENCY RATIOS:						
Capital Turnover	(Yrs)	1.44	1.48	1.61	1.26	1.46
Farm Equity	(%)	20.0	41.0	39.9	52.6	41.1
Return on Equity	(%)	-0-	-0-	-0-	3.9	-0-
Return on Total Capital	(%)	3.2	4.6	4.6	6.9	5.1
Current Ratio	($)	2.09	2.69	2.32	2.80	2.49
Net Capital Ratio	($)	1.25	1.70	1.66	2.11	1.70
Debt/Equity Ratio	($)	4.00	1.44	1.51	0.90	1.43
MANAGEMENT FACTORS:						
Cows/Man Equivalent	(#)	23	25	25	27	25
Milk Sold/Cow	(L)	5,251	5,393	5,649	5,605	5,518
Milk Sold/Man Equivalent	(L)	119,901	133,665	142,400	150,007	139,142
Purchased Feed/Cow	($)	698	709	677	726	702
Purchased Feed/Cow	(Kgs)	2,639	2,768	2,631	3,051	2,787
Feed as % of Milk Sold	(%)	30.4	30.5	27.7	30.1	29.5
Feed as % of Total Costs	(%)	26.7	28.3	25.7	27.8	27.1
Feed/HL Milk Sold	(Kgs)	50.3	51.3	46.6	54.4	50.5
Feed Cost/HL Milk Sold	($)	13.29	13.15	11.98	12.96	12.73

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Appendix

The Tables in the Appendix outline per farm, per cow, per hectolitre, per hundredweight and percentage figures for all farms combined in this Summary.

The Appendix also provides a Glossary of Terms used throughout the Summary. A brief definition or explanation of each term is also provided.

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RECEIPTS AND EXPENSES SUMMARY

ITEM	PER FARM	PER COW
RECEIPTS:		
Fluid Milk Sales	$100,400.	$ 1,593.
Manufactured Milk Sales	42,899.	680.
Milk Subsidies	6,912.	110.
Livestock Sales	12,793.	203.
Crop Sales	2,547.	40.
Miscellaneous Sales	10,948.	174.
TOTAL FARM RECEIPTS	$176,500.	$ 2,800.
Adj. for Inventory Change	$ 1,415.	$ 22.
TOTAL FARM INCOME	$177,915.	$ 2,822.
EXPENSES:		
Milk Hauling	$ 5,333.	$ 85.
Dairy Feed	44,272.	702.
Livestock Purchases	3,296.	52.
Vet & Drugs	1,707.	27.
Breeding	1,587.	25.
Dairy Supplies	3,676.	58.
Milk Marketing	7,258.	115.
Crop Expenses	11,923.	189.
Building Repairs	3,656.	58.
Utilities	4,433.	70.
Tractor & Machinery Expense	10,517.	167.
Truck & Auto Expense	2,512.	40.
Interest	13,452.	213.
Hired Labor	13,012.	206.
Taxes	897.	14.
Insurance	2,437.	39.
Miscellaneous	12,506.	198.
TOTAL CASH EXPENSES	$142,477.	$ 2,260.
Depreciation	$ 20,945.	$ 332.
TOTAL FARM EXPENSES	$163,422.	$ 2,592.
NET FARM INCOME	$ 14,493.	$ 230.

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RECEIPTS AND EXPENSES SUMMARY (Cont'd)

PER 100 LITRES	PER CWT.	PERCENTAGE
$ 28.86	$ 12.71	56.4
12.33	5.43	24.1
1.99	0.88	3.9
3.68	1.62	7.2
0.73	0.32	1.4
3.15	1.39	6.2
$ 50.74	$ 22.35	99.2
$ 0.41	$ 0.18	0.8
$ 51.15	$ 22.53	100.0
$ 1.53	$ 0.67	3.3
12.73	5.61	27.1
0.95	0.42	2.0
0.49	0.22	1.0
0.46	0.20	1.0
1.06	0.47	2.3
2.09	0.92	4.4
3.43	1.51	7.3
1.05	0.46	2.2
1.27	0.56	2.7
3.02	1.33	6.4
0.72	0.32	1.5
3.87	1.70	8.2
3.74	1.65	8.0
0.26	0.11	0.6
0.70	0.31	1.5
3.60	1.59	7.7
$ 40.96	$ 18.04	87.2
$ 6.02	$ 2.65	12.8
$ 46.98	$ 20.70	100.0
$ 4.17	$ 1.84	-

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GLOSSARY OF TERMS

ASSETS - All items of value owned by the farm business.

CAPITAL TURNOVER - The length of time, measured in years, that is required to generate sufficient income to equal total capital invested in the farm business. The ratio is Total Capital Invested divided by Total or Gross Farm Income.

CASH EXPENSES - The sum of all cash expenses expended by the farm business during the year. This includes such items as feed, livestock purchased, hired labor, interest and marketing costs.

DEPRECIATION - This is an amount which represents the loss in value of an asset over a certain period of time due to the number of years of remaining life, the amount of use and obsolescence. In this summary, tax depreciation rates are used.

EQUITY - This is the difference between the value of assets and liabilities and represents the value of assets that would remain if all debts were paid off. Further, it represents the capital contribution to the business by the owner.

FARM RECEIPTS - The sum of all cash receipts received by the business during the year. This includes such items as fluid milk sales, livestock sales and miscellaneous sales.

INTERMEDIATE TERM LIABILITIES - This is a debt owed by the business to others with a usual term of from 1 to 10 years.

INVENTORY ADJUSTMENT - This represents an increase or decrease in the value of inventory (livestock, crops, supplies) held by the farm to earn income.

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LABOR AND MANAGEMENT INCOME - This term represents Net Farm Income with an adjustment made for unpaid family labor and interest on equity. It represents a return to the operator for his labor and management skills after all other costs have been deducted.

LIABILITIES - Debts owed by the business to others.

LONG TERM LIABILITIES - Debts of a term greater than 10 years.

MAN EQUIVALENTS - Total number of months of labor including operator, hired and unpaid family labor divided by 12 to reduce the total labor force to the equivalent of the number of men employed on a yearly basis. Further, this figure adjusted against a charge on a per worker basis, adjusted annually by 7 percent.

NET FARM INCOME - Total Farm Income minus Total Farm Expenses. This represents the return to the farm, the operator and family for labor, management and capital.

RETURN TO EQUITY - This represents the return to the owners capital after adjustments have been made for operator labor. The calculation is: (Net Farm Income - Operator Labor) x 100 Divided by Equity.

RETURN TO INVESTED (TOTAL) CAPITAL - This represents the rate of return achieved by the total capital invested in the farm business. The calculation is: (Net Farm Income + Interest Paid - Operator and Family Labor) x 100 Divided by Total Capital Investment (Total Assets).

SHORT TERM LIABILITIES - Debts owed by the business that have a term of less than one (1) year. Short term may also be called Current.

POOR

QUALITY

ORIGINAL